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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/735,625      | 12/16/2003  | Tamon Kasajima       | 033211-042          | 2676             |

21839 7590 07/21/2005

BUCHANAN INGERSOLL PC  
(INCLUDING BURNS, DOANE, SWECKER & MATHIS)  
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EXAMINER

JACKSON, TYRONE D

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2862

DATE MAILED: 07/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/735,625

Applicant(s)

KASAJIMA ET AL.

Examiner

Tyrone Jackson

Art Unit

2862

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9 and 11-14 is/are rejected.
- 7) ☒ Claim(s) 3 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

Figures 1-4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 4, 5, 7, 8, 11, 12 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Hachisuka et al {6,479,988}.

Regarding claims 1 and 8, Hachisuka et al teaches a method of connecting a plurality of probe pins for measurement of characteristics of a thin-film magnetic head (column 2 lines 20-22), to a plurality of first external connection pads, which are electrically connected to a plurality of terminal electrodes of a write magnetic head element (column 5 lines 37-39), respectively, and to a plurality of second external connection pads, which are electrically connected to a plurality of terminal electrodes of a read magnetic head element (column 5 lines 35-37), wherein an approach direction of said probe pins **15a** to said first external connection pads **31a** and approach direction of said probe pins **15b** to said second external connection pads **31b** are made different from each other.

Regarding claims 4 and 11, Hachisuka et al shows that the described connection method wherein the approach directions are different from each other by an angle smaller than 90° (Fig. 3a).

Regarding claims 5 and 12, Hachisuka et al teaches the described connection method, wherein the probe pins are connected to the first and second external connection pads, which exist on an identical surface (Fig. 3a).

Regarding claims 7 and 14, Hachisuka et al teaches the described connection method, wherein the probe pins are four probe pins which are connected to two of the

first external connection pads and two of the second external connection pads, respectively (column 5 lines 35-39).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 6, 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hachisuka et al in view of Patel {5,639,266}.

Regarding claims 2 and 9, Hachisuka does not teach differing the approach direction of the probe pins by 90 degrees or 180 degrees. Patel, however, does teach having a plurality of probe pins (one or more conductors) connected to a plurality of first external connection pads and to a plurality of second external connection pads, wherein the approach directions are different from each other by 180 degrees (column 2 line 66-column 3 line 6). It would have been obvious to one of ordinary skill in the art to use the connection method explained by Patel to connect the thin-film magnetic head tester of Hachisuka because having the approach direction differ by 180 degrees causes signal flow in opposite directions through proximate contacts which reduces crosstalk (column 4 lines 34-41).

Regarding claims 6 and 13, Hachisuka does not show external connection pads existing on different surfaces. Patel does explain a connection method wherein the pins are connected to the external connection pads, which exist on different surfaces (the pins are connected to different regions of different contacts) in such a way as to allow for the current from each surface to flow in opposite directions. It would have been obvious to one of ordinary skill in the art to have the first and second external connection pads exist on different surfaces as taught by Patel implemented with the thin-film magnetic head tester taught by Hachisuka so as to allow for the current through the probe pins to flow in different directions, thereby reducing crosstalk as described earlier.

***Allowable Subject Matter***

Claims 3 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents 6573711, 6483298 and 6433540 all disclose various types of methods for testing magnetic heads.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

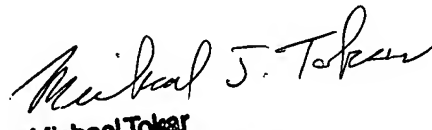
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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tyrone Jackson  
7/13/05



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